1. A method of producing an electromechanical circuit element, the method comprising:

    providing a lower structure having lower support structures and a lower electrically conductive element;

    forming an electromechanically responsive element on an upper surface of the lower structure so as to contact the lower support structures;

    forming an upper structure over the nanotube ribbon, the upper structure including upper support structures and an upper electrically conductive element;

    wherein the electromechanically responsive element is a nanotube.

2. A method of producing an electromechanical circuit element, the method comprising:

    providing a lower structure;

    forming a nanotube ribbon on an upper surface of the lower structure;

    after the nanotube ribbon is formed on the lower structure, forming an upper structure over the nanotube ribbon.

3. A method of producing an electromechanical circuit element, the method comprising:

    providing a lower structure;

    forming a nanotube ribbon on an upper surface of the lower structure;

    forming an upper structure over the nanotube ribbon;

    wherein at least one of the lower and upper structures includes a region having sacrificial material in contact with the nanotube ribbon and wherein the method includes the removal of such sacrificial material;

    further wherein the lower and upper structures are formed to have recesses in at least one of their surfaces and wherein the nanotube ribbon is made to suspend between the recesses of the lower and upper structures.

4. The method of claim 3 wherein the lower and upper structures are formed to each have conductive traces in cross relation relative to the suspended nanotube ribbon.

5. A method of producing an electromechanical circuit element, the method comprising:

providing a generally planar, periodic structure having an alternating array of nonconductive supports and electrical traces, the nonconductive supports having upper surfaces disposed in a plane higher than the electrical traces;

wherein each member of the alternating array extends substantially in the same direction as one another;

forming an array of nanotube ribbons across the nonconductive supports so as to contact the upper surfaces of the nonconductive supports; and

forming an upper periodic structure having an alternating array of nonconductive supports and electrical traces over the nanotube ribbon array, the alternating array of the upper structure extending in substantially the same direction as the alternating array of the generally planar, periodic structure.

6. A method of producing an electromechanical circuit element, the method comprising:

providing a first nonconductive support having an upper surface and extending in a first direction;

providing a second nonconductive surface having an upper surface and generally extending in the first direction;

wherein the upper surfaces of the first and second nonconductive supports form a plane;

providing an electrical trace generally extending in the first direction, the electrical trace disposed between the first and second nonconductive supports and a non-zero distance away from the plane;

forming an array of nanotube ribbons across the nonconductive supports so as to contact the upper surfaces of the nonconductive supports; and

forming an upper structure over the array of nanotube ribbons, the upper structure including upper support structure generally extending in the first direction and an upper electrically conductive element.

7. The method of claim 6 wherein the electrical has a longitudinal axis and wherein the array of nanotube ribbons is formed to have an orientation that crosses the

longitudinal axis of the electrical trace.

8. The method of claim 7, wherein the upper electrically conductive element has a longitudinal axis that is formed to be parallel to the longitudinal axis of the electrical trace.

9. The method of claim 7 wherein the array of nanotube ribbons is formed to cross the longitudinal axis of the lower electrically conductive element at about 90 degrees.

10. The method of claim 6, wherein the electrical trace is made of doped silicon.

11. The method of claim 6, wherein the upper electrically conductive element is made of doped silicon.

12. The method of claim 6, wherein the nanotube ribbon is made from selectively removing material from a non-woven fabric of nanotubes.

13. The method of claim 6, wherein each nanotube ribbon in the array of nanotube ribbons is substantially a monolayer of nanotubes.

14. The method of claim 6 wherein the upper electrically conductive element is formed to be in vertical alignment with the electrical trace.

15. The method of claim 6 wherein the upper electrically conductive element is formed to be horizontally offset relative to the electrical trace.

16. The method of claim 6 wherein the upper electrically conductive elements is formed so that a portion thereof is over the upper support structure and another portion thereof is over the electrical trace.

17. A method of producing an electromechanical circuit element, the method comprising:

providing a structure having a first electrically conductive element;

forming a defined pattern of nanotube fabric spaced relative to the first electrically conductive element; and

providing a structure having a second electrically conductive element spaced relative to the defined pattern of nanotube fabric and

disposed on the opposite side of the fabric from the first electrically conductive element.

18. The method of claim 17 wherein the first and second electrically conductive elements have a first and second longitudinal axes that are generally parallel.

19. A method of producing an electromechanical circuit element, the method comprising:

providing a first structure having a first electrically conductive element having a longitudinal axis;

forming a defined pattern of nanotube fabric in spaced relation to the first electrically conductive element; and

forming a second structure having a second electrically conductive element having a longitudinal axis, the second electrically conductive element in spaced relation to the defined pattern of nanotube fabric;

wherein, the second electrically conductive element is disposed on the opposite side of the fabric from the first electrically conductive element;

further wherein, the longitudinal axes of the first and second electrically conductive elements are generally parallel.

20. A method of producing an electromechanical circuit element, the method comprising:

providing a lower structure having lower support structures and a lower electrically conductive element;

forming a defined pattern of nanotube fabric on an upper surface of the lower structure so as to contact the lower support structures;

forming an upper structure over the defined pattern of nanotube fabric, the upper structure including upper support structures and an upper electrically conductive element.

21. The method of claim 20 wherein the lower electrically conductive element has a longitudinal axis and wherein the defined pattern of nanotube fabric is formed to have an orientation that crosses the longitudinal axis of the lower electrically conductive element.

22. The method of claim 21, wherein the upper electrically conductive element has a longitudinal axis that is formed to be parallel to the longitudinal axis of the lower electrically conductive element.

23. The method of claim 21 wherein the defined pattern of nanotube fabric is formed to cross the longitudinal axis of the lower electrically conductive element at about 90 degrees.

24. The method of claim 20, wherein the lower electrically conductive element is made of doped silicon.

25. The method of claim 20, wherein the upper electrically conductive element is made of doped silicon.

26. The method of claim 20, wherein the defined pattern of nanotube fabric is made from selectively removing material from a non-woven fabric of nanotubes.

27. The method of claim 20, wherein the defined pattern of nanotube fabric is substantially a monolayer of nanotubes.

28. The method of claim 20 wherein the upper electrically conductive element is formed to be in vertical alignment with the lower electrically conductive element.

29. The method of claim 20 wherein the upper electrically conductive element is formed to be horizontally offset relative to the lower electrically conductive element.